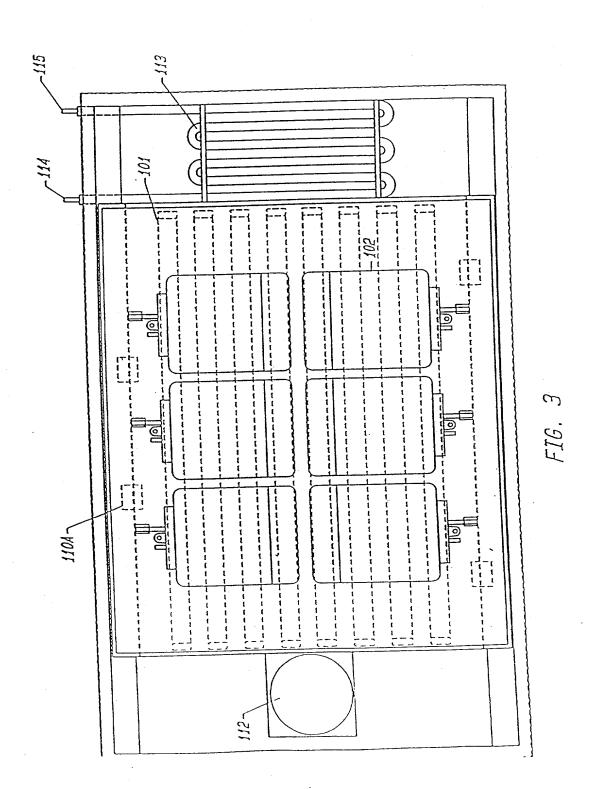


FIG. 2

Sheet 3 of 63



1038 -1034

F16. 4

Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM BLOOD PRODUCTS
Inventor(s): Derek J. HEI and George D. CIMINO
Application No.: 282172000902
Sheet 4 of 63

Sheet 5 of 63

FIG. 5A

Sheet 6 of 63

4'-CMT 4'-BrMT Ó(CH¹)¹O(CH) ¹CH оксн³йсн otan Pan טמא^{זי}סמאיייי למא^{זי}ספאימאי ט(כאי^זז'ספסיבאי OCH PHISHER OCCH 11 OSO CHI לכא^יז'ס(כא ז'אי dan Fin OCCH " זירול כאון זירון OKCH 2 P NH O/CH 2) MILY 4

FIG. 5B

Inventor(s): Derek J. HEI and George D. CIMINO Application No.: 10/051,976 Docket No.: 282172000902

Sheet 7 of 63

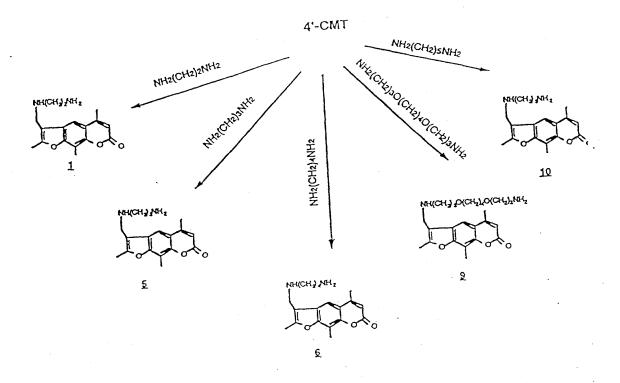


FIG. 5C

Sheet 8 of 63

FIG. 5D

Sheet 9 of 63



FIG. 5E

Sheet 10 of 63

4'-TMP 5'-CMT NH(CH) NH2 17 <u>16</u> 18

FIG. 5F

Sheet 11 of 63

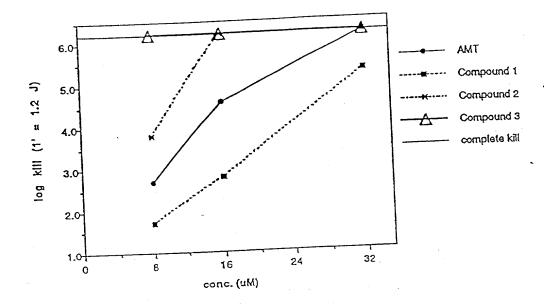
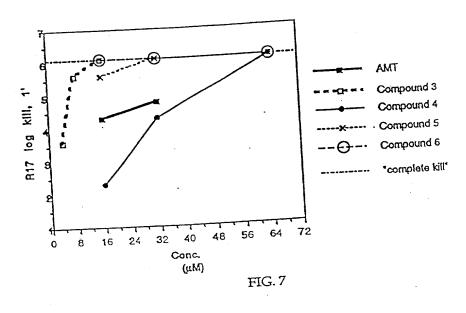


FIG. 6

Sheet 12 of 63





Sheet 13 of 63

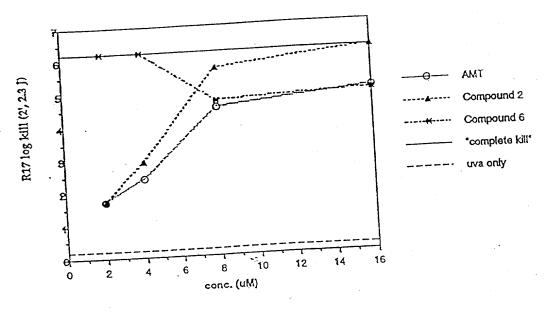


FIG. 8

Inventor(s): Derek J. HEI and George D. CIMINO Application No.: 10/051,976 Docket No.: 282172000902

LILITIF. OFOSOS

Sheet 14 of 63

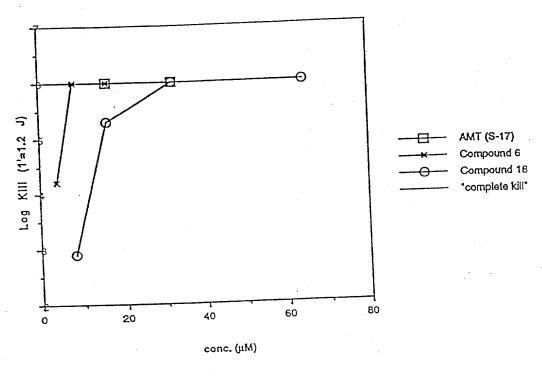


FIG.9

ADDS1975 OFOSOR

Sheet 15 of 63

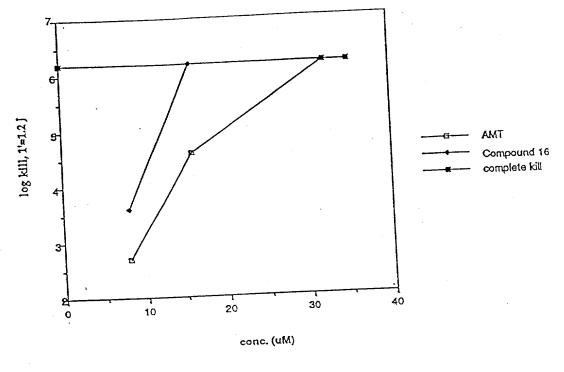


FIG. 10

Sheet 16 of 63



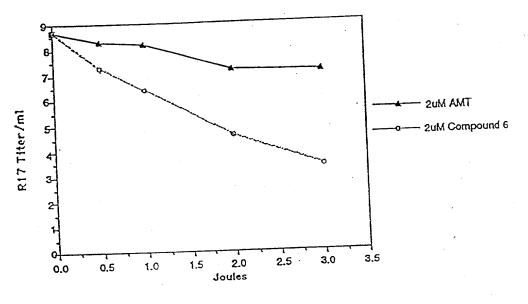


FIG. 11

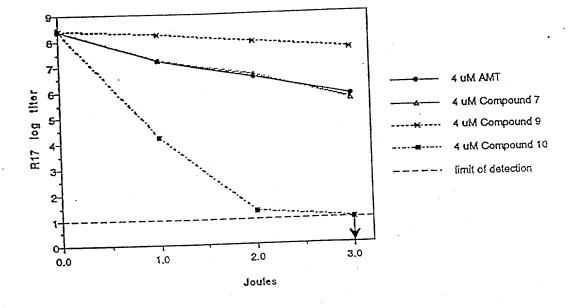


FIG. 12

Sheet 18 of 63

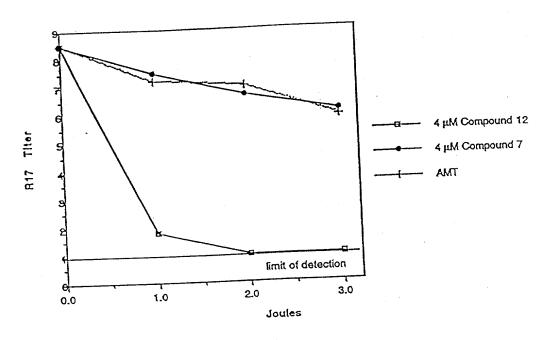


FIG. 13

Sheet 19 of 63

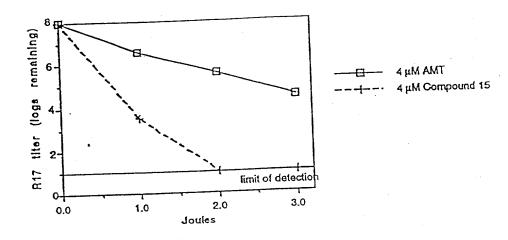


FIG. 14

Sheet 20 of 63

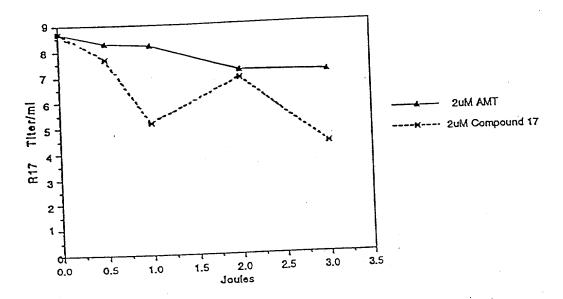


FIG. 15

0.0

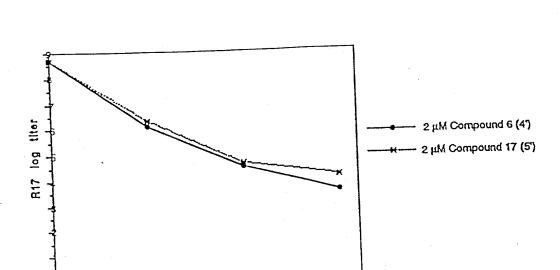


FIG. 16

2.0 Joules

1.0

3.0

Sheet 22 of 63

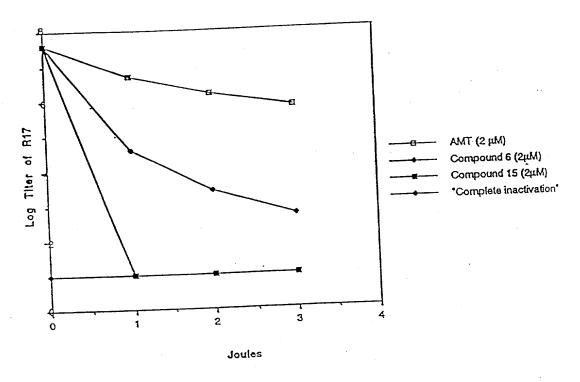


FIG. 17



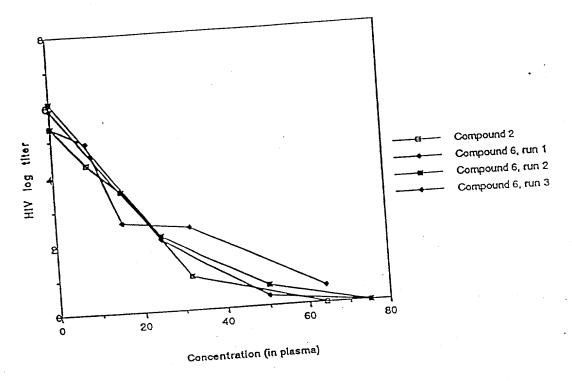


FIG. 18

Sheet 24 of 63

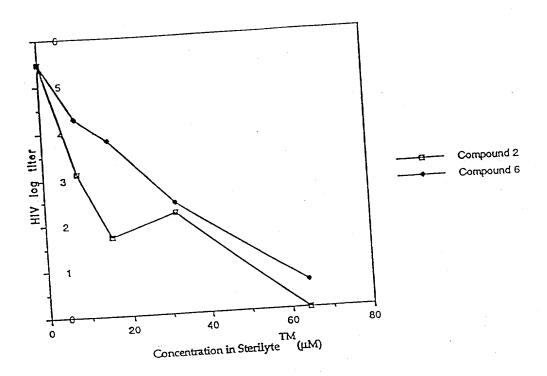
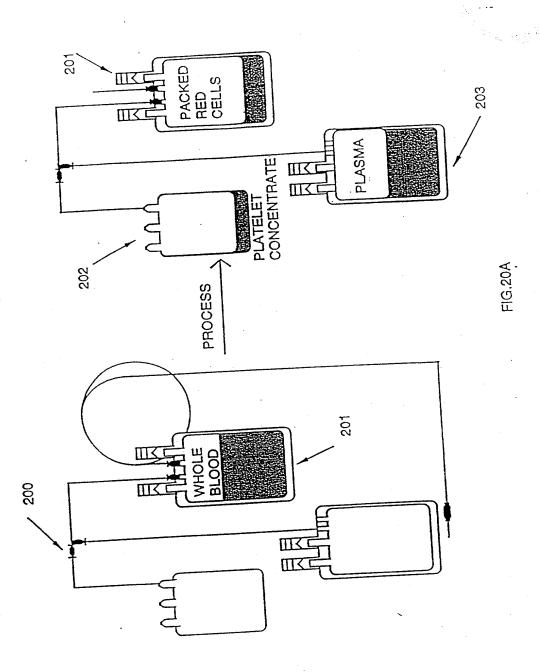


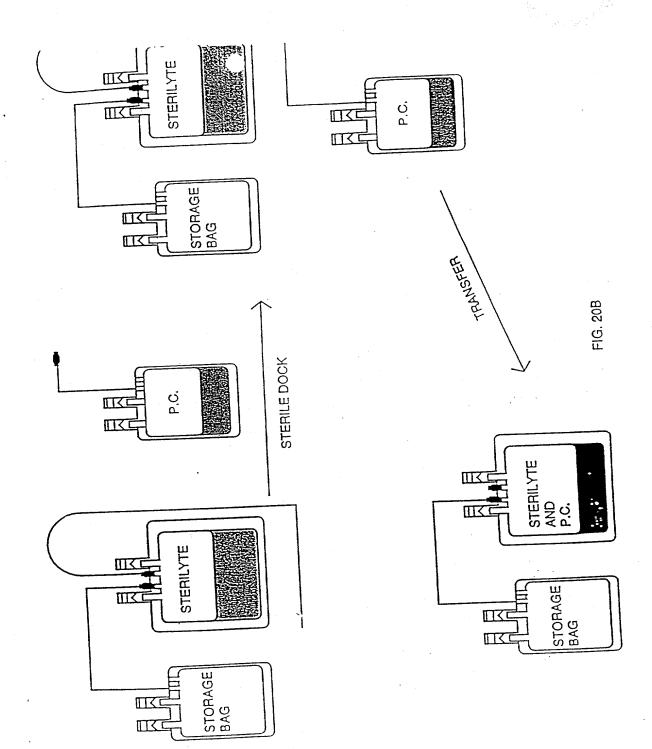
FIG. 19

Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM BLOOD PRODUCTS Inventor(s): Derek J. HEI and George D. CIMINO Application No.: 10/051,976 Docket No.: 282172000902

Sheet 25 of 63

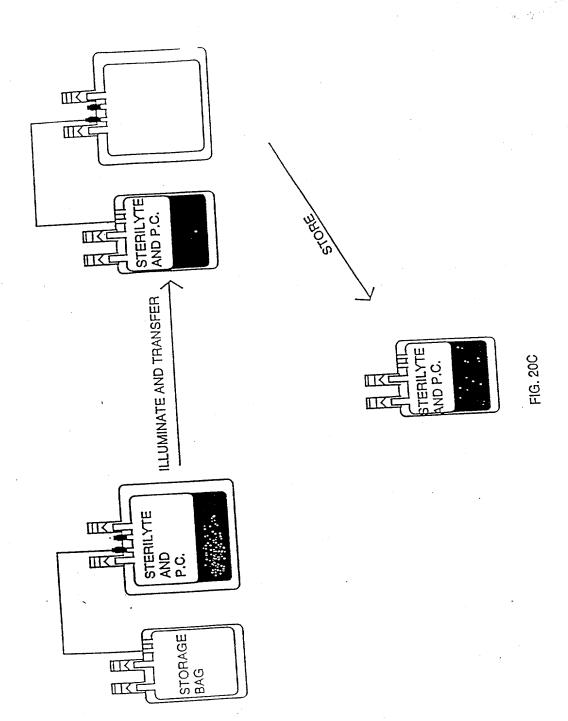


Sheet 26 of 63



1001975 CHOSOR

Sheet 27 of 63



Sheet 28 of 63

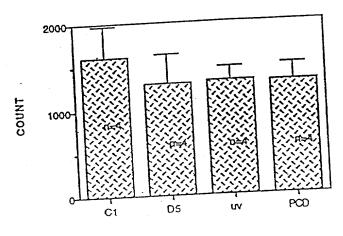


FIGURE 21A

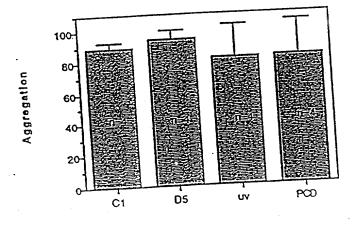


FIGURE 21B

Sheet 29 of 63

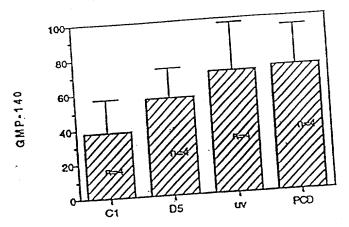


FIGURE 21C

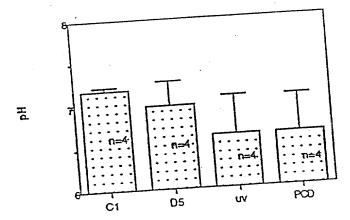


FIGURE 21D

Sheet 30 of 63

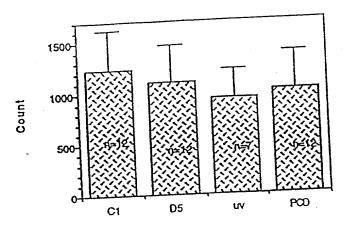


FIGURE 22A

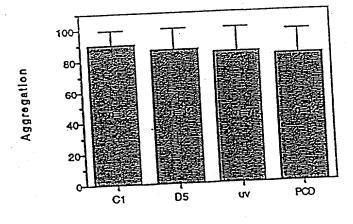


FIGURE 22B

Sheet 31 of 63

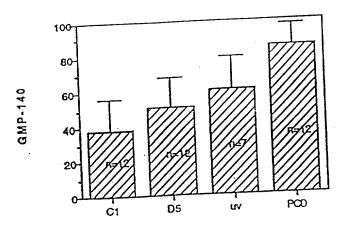


FIGURE 22C

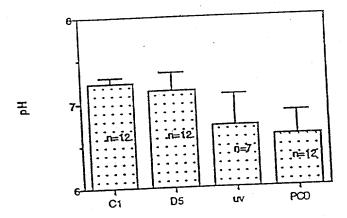


FIGURE 22D

Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM BLOOD PRODUCTS
Inventor(s): Derek J. HEI and George D. CIMINO
Application No.: 10/051,976
Docket No.: 282172000902

Sheet 32 of 63

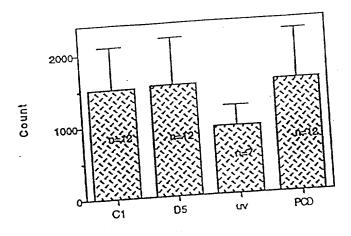


FIGURE 23A

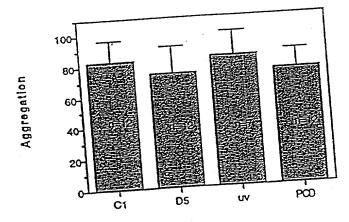


FIGURE 23B

Sheet 33 of 63

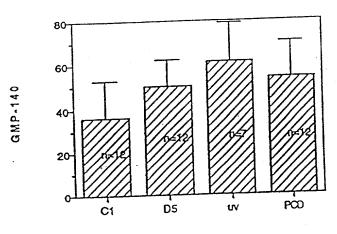


FIGURE 23C

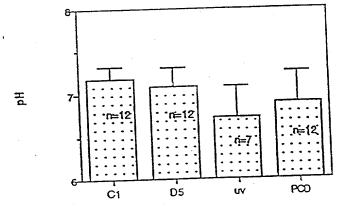


FIGURE 23D

Sheet 34 of 63

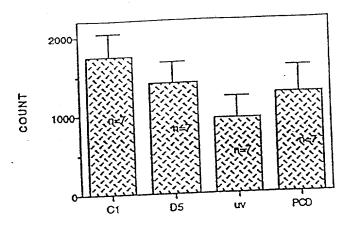


FIGURE 24A

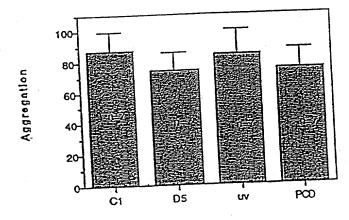


FIGURE 24B

Sheet 35 of 63

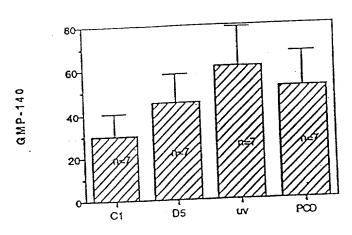


FIGURE 24C

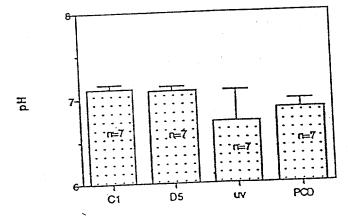
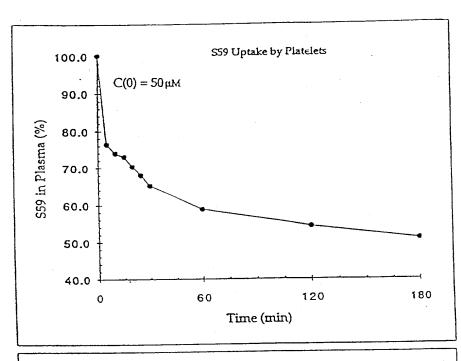


FIGURE 24D

Inventor(s): Derek J. HEI and George D. CIMINO Application No.: 10/051,976 Docket No.: 282172000902

Sheet 36 of 63

Figure 25A



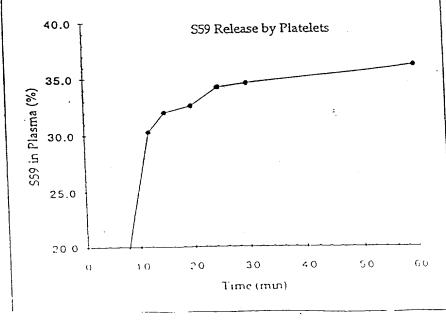
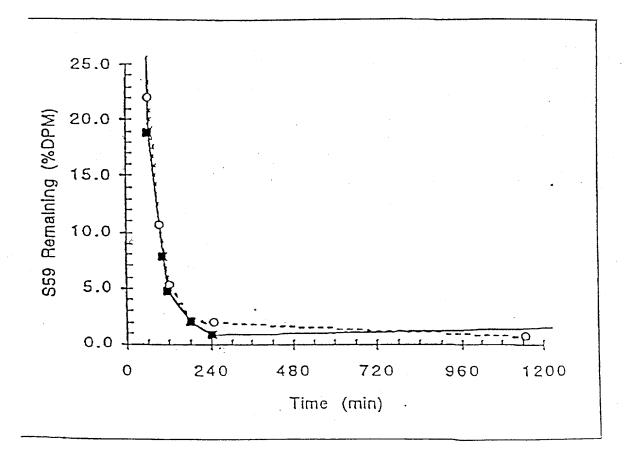


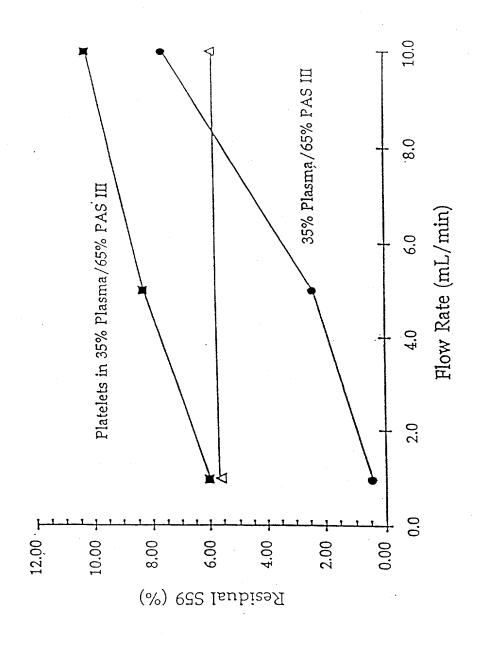
Figure 25B

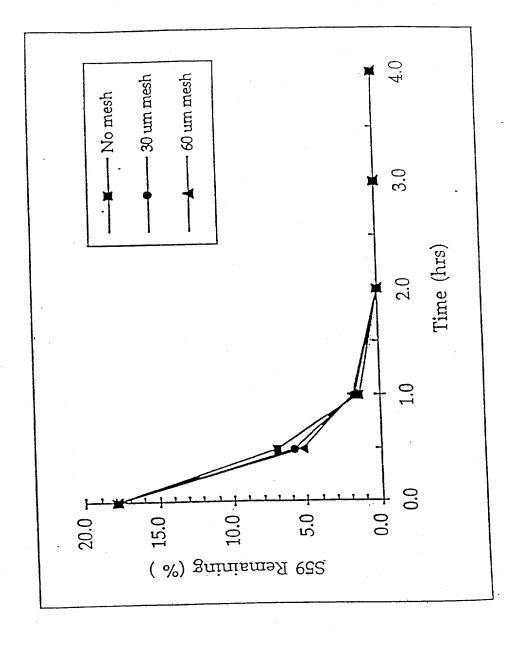


Sheet 38 of 63



LTITALS/B. C4051E



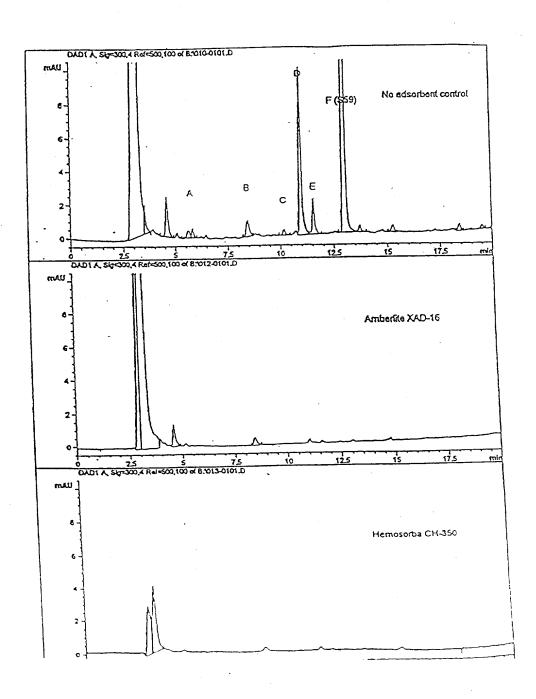


Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM BLOOD PRODUCTS
Inventor(s): Derek J. HEI and George D. CIMINO
Application No.: 282172000902
Sheet 39 of 63

Inventor(s): Derek J. HEI and George D. CIMINO Application No.: 10/051,976 Docket No.: 282172000902

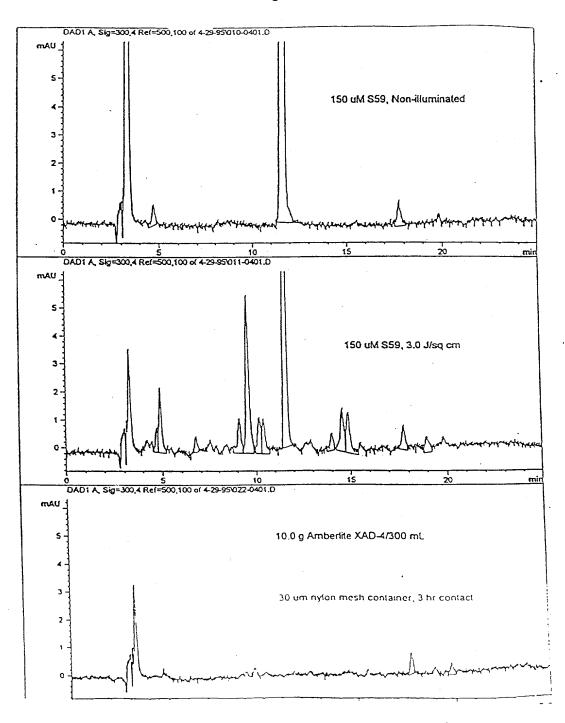
Sheet 40 of 63

Figure 28A

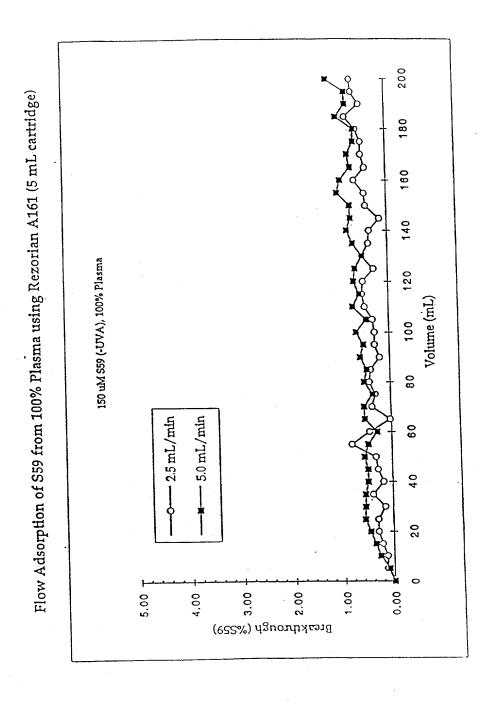


Sheet 41 of 63

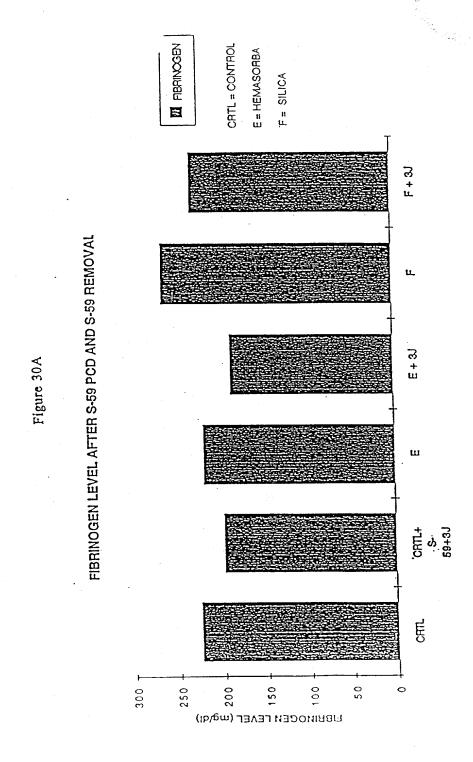
Figure 28B







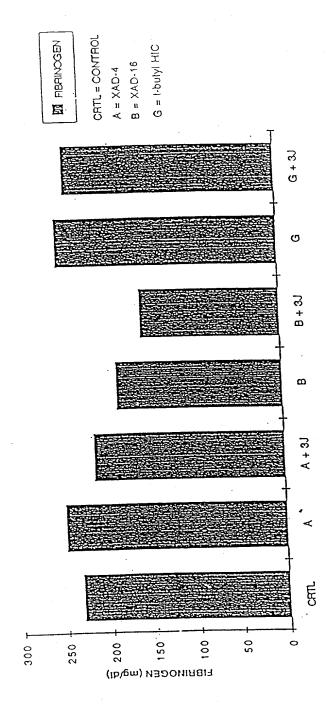
Sheet 43 of 63



AICHASTE CHCSCE

Figure 30B

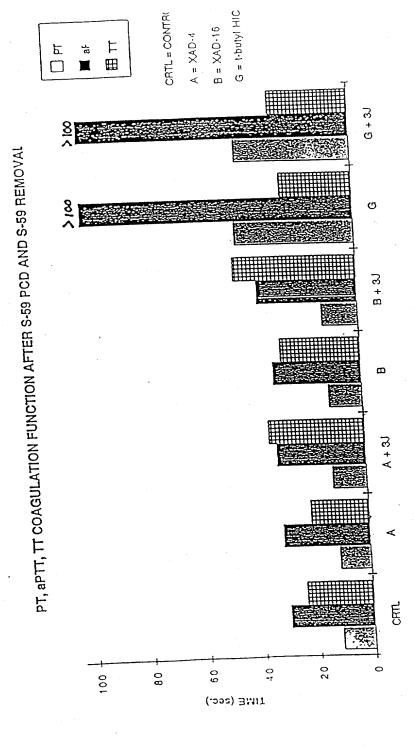
FIBRINOGEN LEVEL AFTER S-59 PCD AND S-59 REMOVAL



Sheet 44 of 63

Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM BLOOD PRODUCTS
Inventor(s): Derek J. HEI and George D. CIMINO
Application No.: 10/051,976
Docket No.: 282172000902

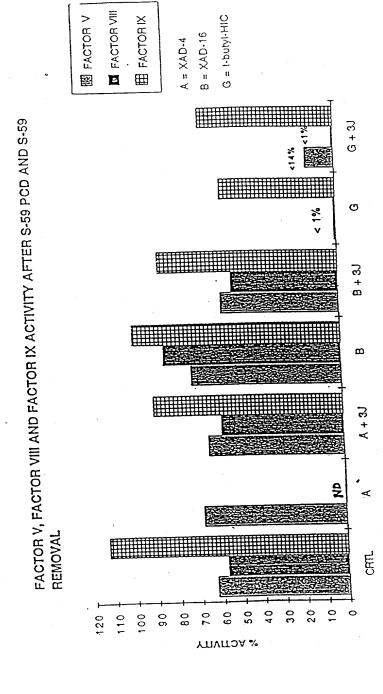
Figure 30C

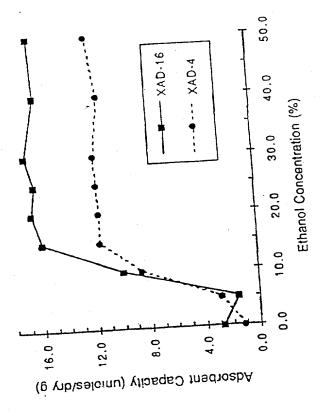


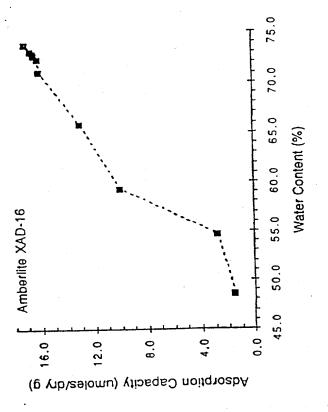
Sheet 45 of 63

Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM BLOOD PRODUCTS
Application No.: 10/051,976
Docket No.: 282172000902
Short AS of AS

Figure 30D







"igure 32

Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM Application No.: 10/051,976

Docket No.: 282172000902

Sheet 49 of 63

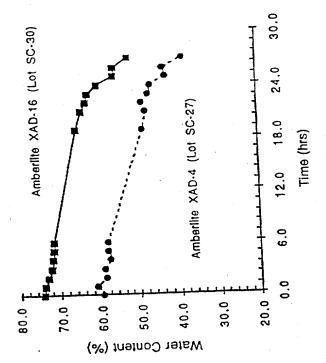


Figure 33

Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM Application No.: 10/051,976

Docket No.: 282172000902

Sheet 50 of 63

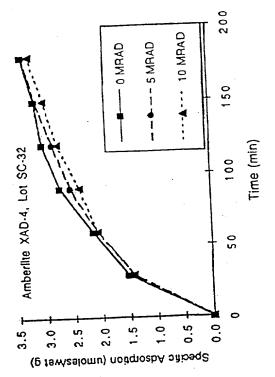


Figure 34-A

Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM BLOOD PRODUCTS
Inventor(s): Detek J. HEI and George D. CIMINO
Application No.: 10/051,976
Docket No.: 282172000902

Sheet 51 of 63

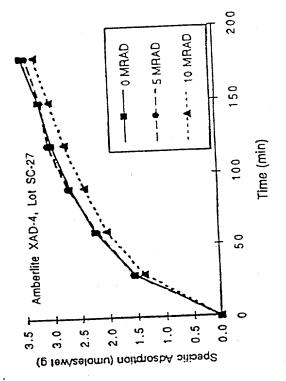


Figure 34-B

Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM Inventor(s): Derek J. HEI and George D. CIMINO

BLOOD PRODUCTS

PLOOD PRODUCTS

Procket No.: 282172000902

Docket No.: 28217200902

Sheet 52 of 63

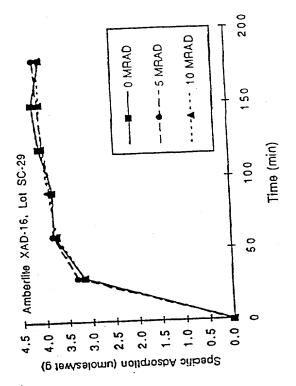


Figure 35-A

Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM BLOOD PRODUCTS
Inventor(s): Derek J. HEI and George D. CIMINO
Application No.: 282172000902
Docket No.: 282172000902

Sheet 53 of 63

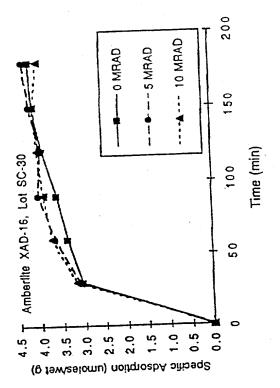
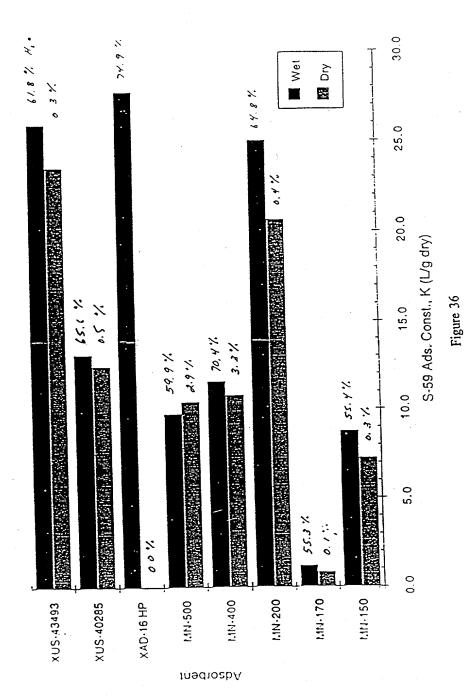


Figure 35-B



Sheet 55 of 63

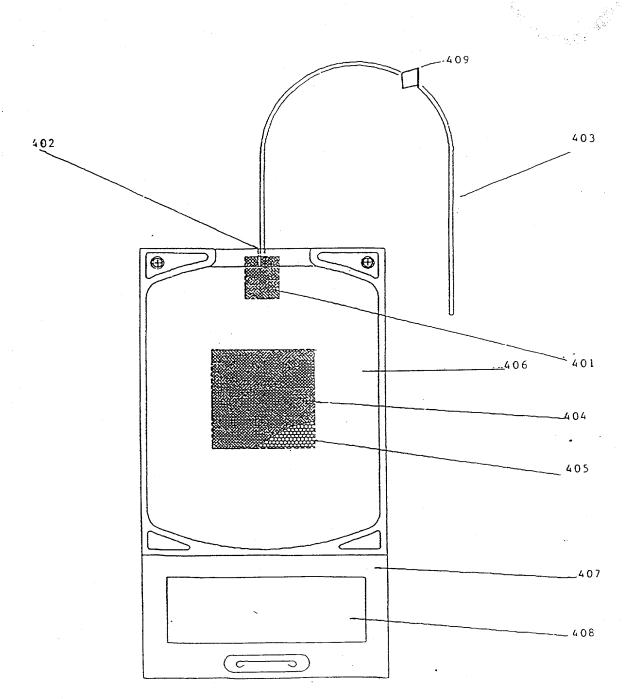


Figure 37

Sheet 56 of 63

<u> </u>			. K., A.
Manufacture of Port Seal Subassembly		Manufacture of Filled Mesh Pouch	
A I Mesh (PL 1144 Plastic) arrives cleaned and cut to final dimension	Q	B 1 Mesh (PL 1144 Plastic) arrives cleaned and cut to final dimension	a
A 2 Mesh is folded longitudely and sealed transversely forming port filter open on one end	X	B2 Mesh is folded longitudely and sealed transversely forming mesh bag, open on one end	
A3 Port filter is sealed to port bushing completing port seal subassembly.		B3 Mesh pouch is precision filled by weight with adsorbent beads and sealed closed	
		B 4 Pouches are cleaned in vacuum and subjected to 100% inspection.	

Figure 38

Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM BLOOD PRODUCTS
Inventor(s): Derek J. HEI and George D. CIMINO
Application No.: 10/051,976
Docket No.: 282172000902

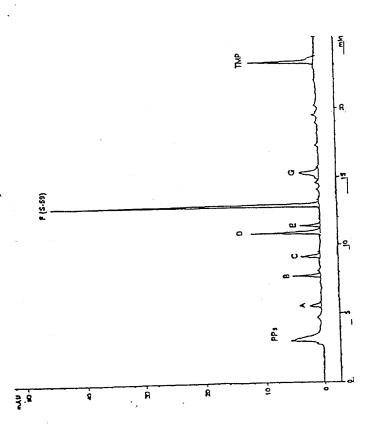
Sheet 57 of 63

Manufacture of PL 2410 Plastic Container		Completion of SRD	
C1 Sides of the container are formed by RF welding 2 plies PL 2410 Plastic, leaving bottom open. C2 Port filter is integrated into port seal of		Finished mesh pouch is inserted into C2, the bottom sealed is made, forming nonsterile SRD. D2 SRD is labeled, inspected and placed in foil pouch.	
C3 Donor lead is sealed at the end and bonded inside port.		D3 Foil pouches (D2) are placed in cartons and subjected to gamma tradiation.	SterJue

Figure 38 continued

Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM BLOOD PRODUCTS Inventor(s): Derek J. HEI and George D. CIMINO Application No.: 10/051,976 Docket No.: 282172000902

Sheet 58 of 63

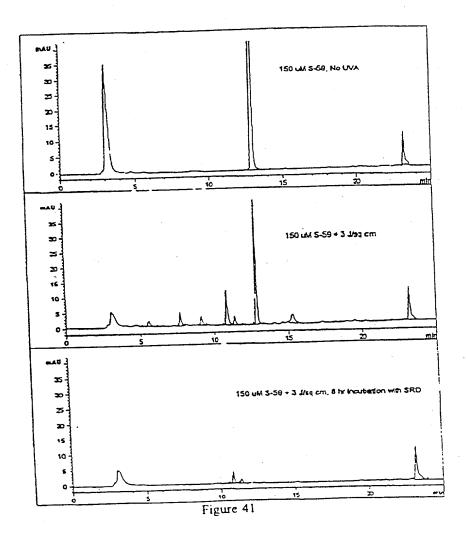


Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM BLOOD PRODUCTS
Inventor(s): Derek J. HEI and George D. CIMINO
Application No.: 10/051,976
Docket No.: 282172000902

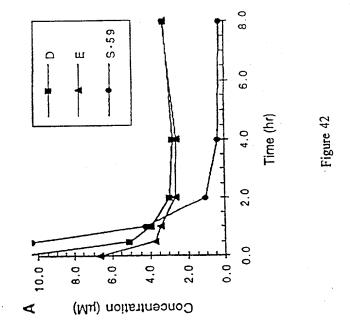
Sheet 59 of 63

k F (S-59)	Peak F (S-59) NH2 S-59	8-59	Photoproduct E: Homodimer of S-59 H ₂ N 2 'HCl
HPLC Peak F (S-59)			Photoproduct D: Heterodimer of S-59 NH, 2:HCI O MH, O MH,

 $z \in \mathbb{R}$

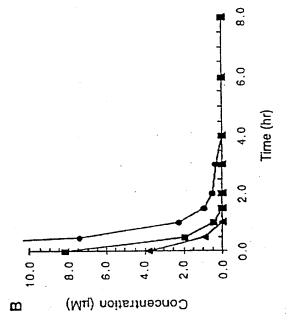


Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM Application No.: 10/051,976
Docket No.: 282172000902
Sheek J. HEI and George D. CIMINO
Application No.: 282172000902
Sheek 61 of 63



Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM BLOOD PRODUCTS
Inventor(s): Derek J. HEI and George D. CIMINO
Application No.: 10/051,976
Docket No.: 282172000902

Sheet 62 of 63



Sheet 63 of 63

Title: METHOD AND DEVICES FOR THE REMOVAL OF PSORALENS FROM Application No.: 10/051,976

Docket No.: 282172000902